

***Escherichia coli* O157:H7 INFECTION**

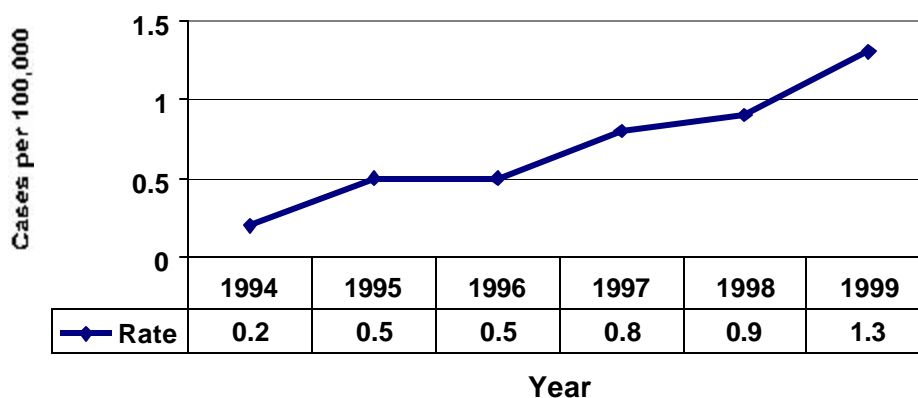
Escherichia coli O157:H7, an enterohemorrhagic strain of *E.coli* (EHEC), is the agent for an illness of variable severity characterized by diarrhea (often bloody) and abdominal cramps. Hemolytic uremic syndrome (HUS) and thrombotic thrombocytopenic purpura (TPP) are serious complications. Approximately 2-7% of patients with EHEC diarrhea progress to HUS, with children under 5 years of age being at greatest risk. Transmission is mainly by ingestion of contaminated food; inadequately cooked beef, raw milk or other foods contaminated with animal feces. It also may be waterborne or transmitted person to person, in families, child care centers, and custodial institutions.

Laboratory Criteria for Confirmation:

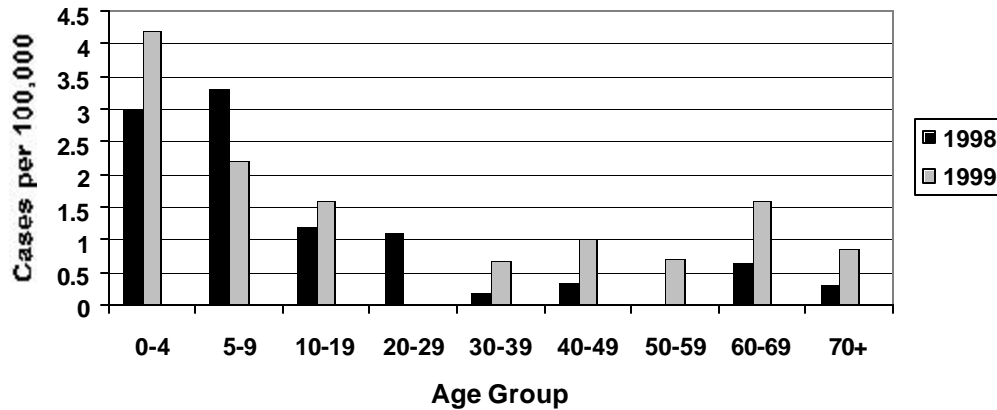
- Isolation of *Escherichia coli* O157:H7 from a specimen, **OR**
- Isolation of Shiga toxin-producing *E.coli* O157:NM from a clinical specimen (Strains of *E. coli* O157:H7 that lose the flagellar “H” antigen become nonmotile and are designated “NM”).

Incidence in Kentucky	1998	1999
Number of Cases	36	50
Rate per 100,000	0.9	1.3
Rate by Gender		
Female	0.7	1.1
Male	1.1	1.4

***E.coli* O157:H7 Incidence, Kentucky, 1994-1999**

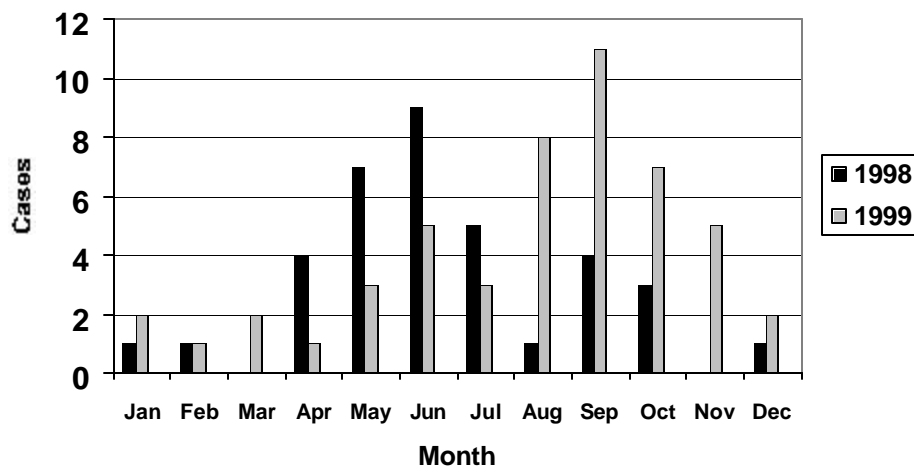


***E.coli* O157:H7 Age –Specific Incidence Kentucky, 1998-1999**



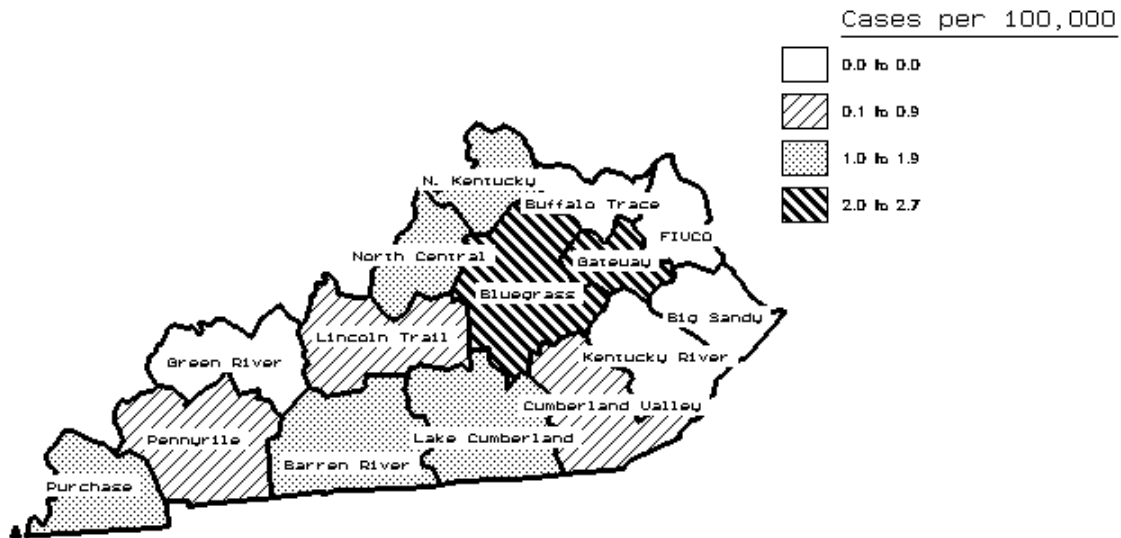
The highest rates in both years were in the 0-4 and 5-9 year age groups. In 1998 the 0-4 year age group had 3.0 cases per 100,000 and the 5-9 year age group had 3.3 cases per 100,000. In 1999 the highest rate was in the 0-4 year age group (4.2 cases per 100,000), followed by the 5-9 year age group (2.2 cases per 100,000).

***E.coli* O157:H7, Reported Cases by Month of Onset Kentucky, 1998-1999**



The cases peaked in June, 1998, with 9 cases, and in September, 1999, with 11 cases.

***E.coli* O157:H7 by District, Kentucky
Average Annual Incidence, 1998-1999**



The Bluegrass District (ADD 15) had the highest reported incidence in 1998, 2.2 cases per 100,000 persons. The Gateway District (ADD 9) had the highest reported incidence in 1999, 5.5 cases per 100,000.